

## Datasheet: MCA2346GA

<b>Description:</b>	RAT ANTI MOUSE CD321
<b>Specificity:</b>	CD321
<b>Other names:</b>	JAM-1
<b>Format:</b>	Purified
<b>Product Type:</b>	Monoclonal Antibody
<b>Clone:</b>	H202-106
<b>Isotype:</b>	IgG1
<b>Quantity:</b>	0.1 mg

## Product Details

### Applications

This product has been reported to work in the following applications. This information is derived from testing within our laboratories, peer-reviewed publications or personal communications from the originators. Please refer to references indicated for further information. For general protocol recommendations, please visit [www.bio-rad-antibodies.com/protocols](http://www.bio-rad-antibodies.com/protocols).

	Yes	No	Not Determined	Suggested Dilution
Flow Cytometry	▪			1/100 - 1/200
Immunohistology - Frozen	▪			
Immunohistology - Paraffin			▪	
ELISA			▪	
Immunoprecipitation	▪			
Western Blotting			▪	

Where this antibody has not been tested for use in a particular technique this does not necessarily exclude its use in such procedures. It is recommended that the user titrates the antibody for use in their own system using appropriate negative/positive controls.

<b>Target Species</b>	Mouse
<b>Product Form</b>	Purified IgG - liquid
<b>Preparation</b>	Purified IgG prepared by affinity chromatography on Protein G from tissue culture supernatant
<b>Buffer Solution</b>	Phosphate buffered saline
<b>Preservative Stabilisers</b>	0.09% Sodium Azide
<b>Carrier Free</b>	Yes
<b>Approx. Protein Concentrations</b>	IgG concentration 1.0 mg/ml
<b>Immunogen</b>	MTE1/MTE2 stromal cell lines.

**External Database  
Links**

**UniProt:**

[O88792](#)   [Related reagents](#)

**Entrez Gene:**

[16456](#)   F11r   [Related reagents](#)

---

**Synonyms**

Jam1, Jcam, Jcam1

---

**Fusion Partners**

Cells from immunised Lou rats were fused with cells of the X63 mouse myeloma cell line.

---

**Specificity**

**Rat anti Mouse CD321 antibody, clone H202-106** recognizes murine CD321, also known as junctional adhesion molecule 1 (JAM-1). CD321 is a 274 amino acid ~32-4 kDa single pass, type I transmembrane glycoprotein, which shares similarities with related proteins JAM-2 and JAM-3.

CD321 is a multifunctional protein primarily expressed by platelets, endothelial and epithelial cells. The CD321 protein co-localises with tight junction molecules in both epithelial and endothelial cells and plays an important role in the regulation of junctional integrity and permeability. In addition, CD321 is a ligand for the integrin LFA-1 and is also involved in the transmigration of leucocytes.

---

**Flow Cytometry**

Use 10ul of the suggested working dilution to label 10<sup>6</sup> cells in 100ul.

---

**References**

1. Malergue, F. *et al.* (1998) A novel immunoglobulin superfamily junctional molecule expressed by antigen presenting cells, endothelial cells and platelets. [Mol Immunol. 35 \(17\): 1111-9.](#)
2. Aurrand-lions, M. *et al.* (2001) Heterogeneity of endothelial junctions is reflected by differential expression and specific subcellular localization of the three JAM family members. [Blood. 98 \(13\): 3699-707.](#)
3. Prestwich, R.J. *et al.* (2009) Immune-mediated antitumor activity of reovirus is required for therapy and is independent of direct viral oncolysis and replication. [Clin Cancer Res. 15 \(13\): 4374-4381.](#)
4. Ebnet, K. *et al.* (2000) Junctional adhesion molecule interacts with the PDZ domain-containing proteins AF-6 and ZO-1. [J Biol Chem. 275 \(36\): 27979-88.](#)
5. Schmitt, M.M. *et al.* (2014) Endothelial junctional adhesion molecule-a guides monocytes into flow-dependent predilection sites of atherosclerosis. [Circulation. 129 \(1\): 66-76.](#)
6. Morita, Y. *et al.* (2010) Heterogeneity and hierarchy within the most primitive hematopoietic stem cell compartment. [J Exp Med. 207 \(6\): 1173-82.](#)

---

**Storage**

Store at +4°C or at -20°C if preferred.

Storage in frost-free freezers is not recommended.

This product should be stored undiluted. Avoid repeated freezing and thawing as this may denature the antibody. Should this product contain a precipitate we recommend microcentrifugation before use.

---

**Shelf Life**

18 months from date of despatch.

---

**Health And Safety  
Information**

Material Safety Datasheet documentation #10040 available at:  
10040: <https://www.bio-rad-antibodies.com/uploads/MSDS/10040.pdf>

---

**Regulatory**

For research purposes only

---

## Related Products

## Recommended Secondary Antibodies

Rabbit Anti Rat IgG (STAR16...)	<a href="#">DyLight®800</a>
Goat Anti Rat IgG (STAR73...)	<a href="#">RPE</a>
Rabbit Anti Rat IgG (STAR21...)	<a href="#">HRP</a>
Rabbit Anti Rat IgG (STAR17...)	<a href="#">FITC</a>
Goat Anti Rat IgG (MOUSE ADSORBED) (STAR71...)	<a href="#">DyLight®549</a> , <a href="#">DyLight®649</a> , <a href="#">DyLight®800</a>
Goat Anti Rat IgG (STAR131...)	<a href="#">Alk. Phos.</a> , <a href="#">Biotin</a>
Goat Anti Rat IgG (STAR69...)	<a href="#">FITC</a>
Goat Anti Rat IgG (STAR72...)	<a href="#">HRP</a>

## Recommended Negative Controls

[RAT IgG1 NEGATIVE CONTROL \(MCA1211\)](#)

<b>North &amp; South America</b>	Tel: +1 800 265 7376 Fax: +1 919 878 3751 Email: <a href="mailto:antibody_sales_us@bio-rad.com">antibody_sales_us@bio-rad.com</a>	<b>Worldwide</b>	Tel: +44 (0)1865 852 700 Fax: +44 (0)1865 852 739 Email: <a href="mailto:antibody_sales_uk@bio-rad.com">antibody_sales_uk@bio-rad.com</a>	<b>Europe</b>	Tel: +49 (0) 89 8090 95 21 Fax: +49 (0) 89 8090 95 50 Email: <a href="mailto:antibody_sales_de@bio-rad.com">antibody_sales_de@bio-rad.com</a>
----------------------------------	---	------------------	---	---------------	---

'M315650:180503'

Printed on 05 May 2018

---

© 2018 Bio-Rad Laboratories Inc | [Legal](#) | [Imprint](#)